



POLYMER COMPOSITE PACKAGING FILM FOR FRESH MEAT AND VEGETABLE PRODUCE

Abstract of the Disclosure

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A composite film is compounded to have a film surface with visual clarity and gas permeability (specifically OTR) control. A first preferred embodiment is a monolayer composite film that includes a PVC polymer film substrate. To provide the composite film with anti-fog and OTR control properties, one or more surface active agents and plasticizers, respectively, are incorporated into the polymer substrate. The orientation of the PVC molecular chain also governs the OTR. Since heat and stretching affect the molecular chain orientation of the film substrate, application of heat and/or imparting stretch forces to the composite film affects the OTR. A second preferred embodiment is a multilayer lamination or extrusion of PVC films that provides OTR control at a fixed composite film gauge. A third preferred embodiment of the invention is a multilayer layer lamination or extrusion formulated using layer distribution to provide a differential heat seal.